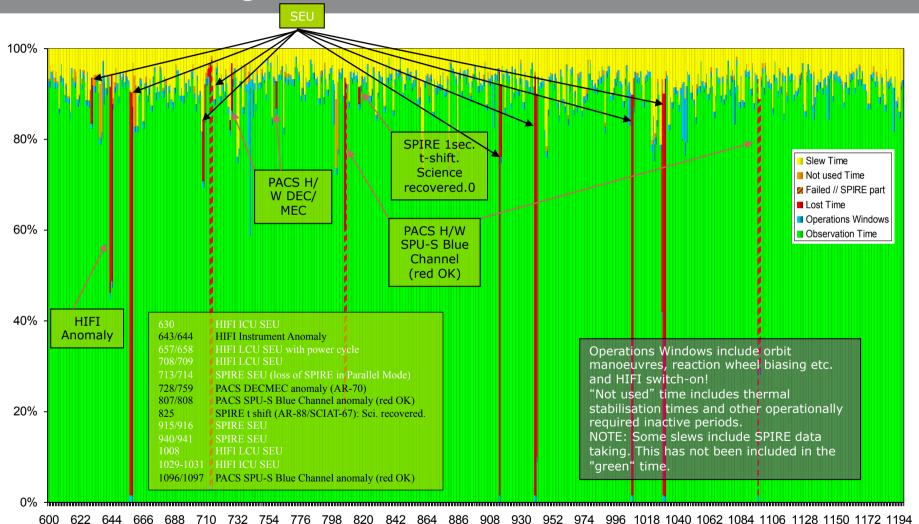


#### Observing status OD#600-1197



4 Jan.2011 - 22 August 2012



Total lost time from OD#170 to OD#1197 – all sources : ~671 hours (3.6%) Total lost time from OD#600 to OD#1197 – all sources : ~288 hours (2.6%)

### Follow-up to previous HUGs:



#### See 4 tracking tables!

#### From HUG#4 :==>

- "Must-do" programme was supported
- HUG questionnaire done by HUG
- Data processing Workshops
  - one held last February
  - □ NHSC/HSC map making workshop @ESAC next January
  - □ HSC starting webinairs on data reduction / calib. Topics
- Calibration Workshops:
  - one held in Jan. with HSC, ICCs and invited expert users
  - similar planned for Spring next year
  - □ "End-Helium Status / LL Meeting" mid-2013



## Post-Operations Phase (POP) – summarising HUG stated concerns:



#### The HUG was previously concerned about:



- overall match of fte support to tasks
- lack of planning how effort will be allocated and prioritized
- □ retention of key expertise & manpower
- particularly concerned over SPIRE POP resources

#### HUG invites ICC representatives to this meeting:

- □ to learn more about plans & concerns of ICCs & HSC
- to explore how HUG can serve as liaison & advocate for users

## Post-Operations Phase (POP) – SGS Response to HUG Concerns:







- lack of detail in the planning and
- □ lack of correlation of tasks with available manpower
- HSOCG#10 (April 18 2012) and HSOCG#11 (July 12)
  - http://herschel.esac.esa.int/twiki/bin/view/HSC/HSOCG\_10
  - http://herschel.esac.esa.int/twiki/bin/view/HSC/HSOCG 11
  - ... intensively addressed these issues
- Numerous actions for planning improvements raised

## Post-Operations Phase (POP) – SGS Response to HUG Concerns (contd.):



HSC Plan (& ICC Plans) elaborated into detailed WPs



- Plans have been provided to HUG
- A Post-Operations Readiness Review was scheduled
  - HUG invited to nominate 2 members to the Board
  - draft Review Procedure has been provided to the HUG
- Above is all a work in progress, targeted on the Oct.
   30 Review presentations to the Board

## Post-Operations Phase (POP) – SGS Response to HUG Concerns (contd.):



#### HSC Plan now specifies:



- manpower profiles globally and per main task area
- □ breakdown of manpower per detailed WP for > 160 WPs
- specifies tasks / areas which our resources cannot cover
- Much work also done to clarify implications of new ESA financial system on Herschel budget and to relate it to constraints (contractor / staff quotas) on manpower
- Some manpower sharing with other projects already in place. Administrative flexibility for this increased as a result of Herschel / Rosetta agreements.

## Post-Operations Phase (POP) – Objectives of the Post-Operations Phase





- high quality community support for ongoing data exploitation
- create, advertise, and deliver, the Herschel legacy for posterity
- derive lessons learned & identify items for future re-use
- enable personnel to perform their own data exploitation

beyond the end of the POP: have only legacy HSA at ESAC

## Post-Operations Phase (POP) – Task Prioritisation:





#### Work packages prioritised according to 3-level scheme:

Priority 1: Must be accomplished to meet minimum goals of Phase. (~top 30%)

*Priority 2:* Is considered a core activity of the Phase. (~middle 40%)

Priority 3: Activities that should be part of activities of Phase, but cannot be accomplished with the available resources. (~remaining 30%)

## Post-Operations Phase (POP) – Defining Dates for Herschel POP:





#### **HSC Post-Operations Costing (CaC) v21**

Launch 14/05/2009

Start routine operations 01/12/2009

End routine operations end March 2013

**End post-operations end-December 2017** 

## Post-Operations Phase (POP) – Top-level HSC Manpower Profile for POP



	2013	2014	2015	2016	2017	
Operations role			(fte)			Total (myr)
Management and Administration	2.75	2.50	2.50	2.50	2.50	12.75
Instrument and Calibration	8.00	7.00	5.50	5.25	3.75	29.50
Data Processing (incl. DP Scientist)	12.00	7.75	6.50	4.25	1.00	31.50
Community Support (incl. Archive Sci.)	6.50	5.00	3.50	3.00	2.25	20.25
Software Maintenance	2.75	2.50	1.60	0.80	0.80	8.45
Computer / Hardware Support	2	1.5	1.5	1.5	1	7.50
Science Archives Team	2	1	0.5	0.5	0.5	4.50
D/TEC support / Quality Control	1	0.75	0.75	0.5	0.5	3.50
Total Mannowar	27.00	27 FA	22.10	10.05	12.05	117.05
Total Manpower	37.00	27.50	22.10	18.05	12.05	117.95



## Post-Operations Phase (POP) – Top-level Manpower Breakdown for Management & Administration Tasks:



WP	Title of Work Package		FT	E per Ye	ear		Total
Number		2013	2014	2015	2016	2017	In my
MM-0100	Mission Management Functions	0.95	0.95	0.83	0.63	0.58	
MM-0200	Scientific Research	0.05	0.05	0.07	0.17	0.17	
MM-0300	Support Cosmic Vision (off Herschel budget)	0.00	0.00	0.10	0.20	0.25	
	Total MM	1.00	1.00	1.00	1.00	1.00	5
PS-0100	Project Scientist Functions	1.00	1.00	1.00	1.00	1.00	
	Total PS	1.00	1.00	1.00	1.00	1.00	5
AA-0100	Secretary / Admin. Assistant	0.75	0.50	0.50	0.50	0.50	
	Total AA	0.75	0.50	0.50	0.50	0.50	2.75
	Total overall	2.75	2.50	2.50	2.50	2.50	12.75



#### Top-level Manpower Breakdown for S/W Maint.



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WP	Title		Total				
Number	of work package	2013	2014	2015	2016	2017	in my
SWM-0100	System-wide configuration & builds	0.75	0.50	0.50	0.25	0.25	2.25
SWM-0200	Team lead		0.25	0.25	0.15	0.15	1.05
SWM-0300	System engineering	0.15	0.15	0.15	0.00	0.00	0.45
SWM-0400	Database admin & maintenance	0.50	0.50	0.25	0.20	0.20	1.65
SWM-0500	S/W development & maintenance	0.75	0.75	0.45	0.20	0.20	2.35
SWM-0600	Test & validation	0.05	0.05	0.00	0.00	0.00	0.1
SWM-0700	Consolidation & reuse	0.30	0.30	0.00	0.00	0.00	0.6
Total		2.75	2.5	1.6	0.8	0.8	8.45





#### Top-level mpwr Breakdown for ICS Team Tasks:

		2013	2013	2014	2014	2015	2015	2016	2016	2017	2017
Subtasks	Description	FTE	FTE allocated in plan	FTE	FTE allocated in plan						
	SPIRE Instrument										
ICST-000	Support Tasks	1.8	1.75	1.65	1.75	1.5	1.5	1.45	1.5	1.175	1.125
	PACS Instrument										
ICST-100	Support Tasks	1.75	2	1.8	2	1.75	2	1.65	2	1.4	1.5
ICST-200	HIFI Instrument Support Tasks Observatory science	1.05	0.95	1	0.95	0.8	0.7	0.75	0.7	0.675	0.575
ICST-300	engineering tasks	0.8	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.375	0.375
	Cross-Calibration										
ICST-400	Tasks	1	1	0.75	0.75	0.5	0.5	0.4	0.5	0.375	0.375
ICST-500	DP scientist	1	1	1	1	1	1	1	1	0.75	0.75
ICST-600	Team Lead Tasks	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.55	0.55
	Total FTEs Difference versus	8.2	8.25	7.75	8	6.85	7	6.55	7	5.3	5.25
	plan		-0.05		-0.25		-0.15		-0.45		0.05



Top-level mpwr breakdown for Comm. Supp Tasks:

		20	13	20	014	20	15	20	16	20	17	
:asks	Description	FTE	FTEs in Plan	FTE	FTEs in Plan	FTE	FTEs in plan	FTE	FTEs in plan	FTE	FTEs in plan	
G-0100	Team Lead tasks	0.3	0.3	0.3	0.3	0.25	0.25	0.25	0.25	0.25	0.2	
G-0200	Mission Planning tasks	1.6	1.6	0	0	0	0	0	0	0	0	
G-0300	Helpdesk tasks	1	1	1	0.95	1	0.7	1	0.7	0.75	0.5	
G-0400	Herschel Science Archive tasks	0.3	0.25	0.3	0.25	0.3	0.2	0.3	0.1	0.3	0.1	
G-0500	User Provided Data tasks	0.8	0.8	0.8	0.6	0.7	0.3	0.7	0.3	0.5	0.1	
G-0600	Publication Tracking tasks	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	
G-0700	Documentation tasks	0.4	0.3	0.6	0.6	0.6	0.3	0.6	0.3	0.35	0.2	
G-0800	Outreach tasks	0.3	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.1	
G-0900	HSC webmaster tasks	0.75	0.75	0.5	0.5	0.5	0.25	0.5	0.25	0.25	0.2	
G-1000	Workshops/Conferences tasks	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0	0.2	0	
G-1100	HIPE acceptance/training tasks	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.3	0	
G-1200	Science Tasks	0.4	0.4	0.8	0.7	0.8	0.7	0.8	0.6	0.7	0.4	
G-1300	NHSC Liaison tasks	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
	Total FTEs	6.75	6.5	5.5	5	5.25	3.5	5.25	3	4	2	26.75
	Difference versus plan		0.25		0.5		1.75		2.25		2	6.75



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#### Top-level Manpower Breakdown for DP Tasks:



WP	Title		FTE per Year							
Number	of work package	2013	2014	2015	2016	2017	in my			
DP-01xx	Team lead and coordination	1.25	0.85	0.6	0.4	0	3.1			
DP-02xx	Software development and maintenance	4.95	2.6	1.8	0.6	0	9.95			
DP-03xx	Product generation	3.4	1.9	1.9	0.85	0.05	8.1			
DP-04xx	Documentation	0.9	0.9	0.9	1.1	0.2	4.0			
DP-05xx	Testing	0.5	0.5	0.3	0.3	0	1.6			
DP-0600	Quality assurance	0.5	0.25	0.25	0.25	0	1.25			
Total		11	7.0	5.75	3.5	0.25	27.5			

## Post-Operations Phase (POP) – To do before the Review:



 We still need (prior to the Review) to extract an overall Post-Operations timeline / schedule (ongoing)



- For the Review we will explicitly list problem (resource deficient) areas
- What's missing from these VGs ... ???

## Post-Operations Phase (POP) – Aims of the Review:



- to review and assess the appropriateness of the Post-Operations
  Phase Plans of the several SGS centres, and the relative
  prioritisation of tasks within the Plans, to fulfil the aims of the
  Herschel Post-Operations Phase as originally conceived or as
  modified by the support needs of the user community that may
  have become evident in the meantime;
- to affirm the adequacy of the assigned resources to accomplish the aforementioned tasks;
- to affirm the readiness of the SGS, its structures & mechanisms, to execute the tasks.

## Post-Operations Phase (POP) – After the Review!!:



Other planned future review-like meetings :==>



ID	Review/ Meeting title	Date	Chair
S-Her-LHe-LL	End-Helium Lessons Learned Meeting	June-July 2013	Her. MM
S-Her-POPS-MC	Post-Operations Mid-Course Review	JanMar. 2016	H/SRE-O H-SRE-S
S-Her-POPS-H/P/S ICC	Centre wrap-up Status Assessments	Around ICC closures	TBD

## Post-Operations Phase (POP) – After the Review!!:



• Draw conclusions ...

